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ABSTRACT

It is apparent from current research and professional experience that body image has a strong social basis, but the form of such comparisons is unclear. Therefore, the aim of this study is to examine likely forms of the social basis of adolescent body image. This study compares two approaches to the social basis of body image to ask to what extent do gendered social comparisons and self-categorizations in terms of sense of group belonging and individuality contribute to body image. Two studies were completed. Study 1 comprised 286 boys and 175 girls; Study 2 comprised 172 boys and 283 girls. In Study 1, body image was slightly higher for boys than girls, yet both girls and boys think that most girls have good body image. Gendered social perceptions were influenced by the gender of the observer for same-sex ratings and opposite-sex ratings. Body image of same-sex peers was higher for girls than boys, and body image of opposite-sex peers was higher for boys than girls. In Study 2, for boys, the opposite sex provided the salient social comparison. For girls, salient social comparisons were also with girls. Implications for research, theory, and practice are discussed. (Contains 6 tables, 1 figure, and 18 references.) (Author/MKA)

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# Understanding the social basis of adolescent Body Image

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## Objectives

The prevalence of clinical cases - as well as more general concerns about the body - creates a need to understand more about sources of body image, and particularly during adolescence. We know from current research and professional expereince that body image has a strong social basis - but the form of such social comparisons is unclear. Therefore, the aim of this study was to examine likely forms of the social basis of adolescent body image.

## Background to the study

Why social processes? Why adolescence? Recent research on body image suggests moving beyond studies with undergraduate students (Striegel-Moore, Silberstein & Rodin, 1993). Indeed, research with adolescents may suggest likely sources of body image. Specifically, this paper focuses on the social basis of body image, that is, how adolescents see themselves in relation to others (Tiggeman, 1996). It is argued that if the so called 'impaired social self [is] integrally linked to body dissatisfaction and eating disorder' (Striegel-Moore et al., 1993, p.300), then we need to know more about social processes that underpin adolescent body image, notably gendered peer relations, self categorisation, social comparisons, regarding diversity of body image with non-clinical samples, especially during adolescence, in the social context of schooling that adolescents have in common.

What is body image? Within a long tradition of research on the structure of self concepts, body image is conceptualised within discrete yet related aspects of self knowledge within cognitive, social and physical domains (e.g., Marsh & Shavelson, 1985; Byrne, 1996). It is argued that perceptions of body, appearance, movement and so on express adolescents' social reality in the physical domain. So the study draws on what adolescents say about their bodies. Here, 'Body Image' is the underlying or latent trait that is indicated by cognitive appraisals of one's body as physically co-ordinated, looking good, physically developed and attractive.

The present study compared two approaches to the social basis of body image to ask:

> *To what extent do (a) gendered social comparisons and (b) self categorizations in terms of a sense of group belonging and individuality contribute to body image?*

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Gendered social comparisons. In a recent study with adults, Striegel-Moore et al. (1993) demonstrated the social basis of women's body image, where social anxiety was associated with low 'body esteem'. This suggests that the social basis to body image is implicit in comparison to ones peers as the social reference group. In the present study with adolescents, social comparisons were made explicitly to gender as the salient social category. Girls and boys were asked about themselves and about others, as social objects within what is essentially a gendered social context of schooling. In other words, same-sex and opposite-sex comparisons contribute to one's own body image.

Personal and social identity. In addition, self concepts draw on self categorisation in terms of personal identity as a sense of individuality, and social identity a sense of belonging to social groups (Turner, 1987; Oakes *et al.*, 1994; Bornholt & O'Neill, 1996). This approach to self concepts suggests personal and social layers of explanation for body image. It is important to note that belonging and individuality is flexible in response to variations in context and context, and that developmental trends from childhood through adolescence suggest an increasing sense of individuality and a more moderate sense of group belonging (Bornholt, 1996). Based on previous research, a sense of belonging to social groups at school would contribute to adolescent body image. The extent to which body image expresses personal identity is an open question.

## METHOD

Design. Contributions to adolescent body image are evaluated in a correlational Study 1 for a cross-sectional sample of adolescents. Conclusions are strengthened by replication in Study 2.
Participants were adolescents aged 11 to 16 (Study1 boys N = 286, girls N = 175; Study2 boys, N = 172, girls N = 283) from middle class area of Sydney (SEIFA 1024, ABS 1990).
Measures. The Aspects of Self Knowledge (ASK-S&P) Inventory (Bornholt, 1996) asked adolescents about related yet discrete physical and social aspects of school life, including: Body Image, Appearance, Friendship, Self Expression, Belonging, and Individuality. For the social comparisons, ASK-S&P items were repeated for '*What most girls would say*' and then '*What most boys would say*'. Rating scales were from (1) UNlike me to (7) Like me.
Administration was in school year groups under exam conditions in the school hall.
Social and Physical Aspects of Self Knowledge scales are each indicated by five items. These aspects tend to cluster around 'Self Expression', where Individuality is distinct from Belonging, and a distinction is made for related aspects of Body Image and Appearance.

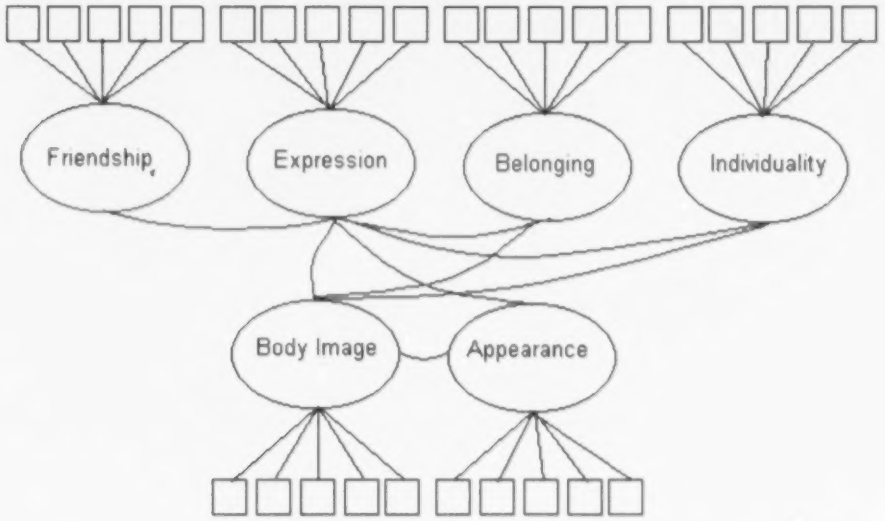


Figure 1. Measurement model of Social and Physical Aspects of Self Knowledge

## RESULTS

### Study 1

Confirmatory Factor Analysis (LISREL7 ML) indicated sound measurement of adolescent body image and other scales. The model of six related factors (ChiSq/df 3.4, GFI 0.83, AdjGFI 0.80, RMSR 0.08, residuals ranged from -0.23 to 0.23 median .004) compared favourably to the two factor model of domain specific social and physical self concepts (ChiSq/df 5.4, GFI 0.71, AdjGFI 0.66, RMSR 0.09, residuals from -0.23 to 0.58 median 0). Factor loadings justified unit weighted scale scores (except one item that was excluded). Scale scores were roughly normally distributed with means somewhat above mid-point. That is, on average, adolescents see themselves as slightly above psychological mid-point of the scale regarding body image. It was expected that Body Image was related to yet discrete from Appearance, and the social nature of adolescent Body Image was evident as moderate to strong correlations (accounting for 25% to 50% of variance) especially with Friendship, Self Expression, and Group Belonging.

The gendered nature of body image refers to same-sex and opposite-sex peers, but in different ways for boys and girls, and minor variations in body image across age groups ($F = 1.5$, n.s.) suggest a peer frame of reference. This means that adolescents' own age groups provide the frame of reference for such self evaluations. Body image was slightly higher for boys ($F=7.6$, $p=0.01$, mean 4.6, S.D. 1.1) than girls (mean 4.3, S.D. 1.1, effect size 0.27). Yet both girls

and boys think that most girls have good body image. Gendered social perceptions were influenced by the gender of the observer for same sex ratings ($F=3.5$, $p=0.01$) and opposite sex ratings ($F = 2.8$, $p = 0.02$). Body image of same-sex peers was higher for girls than boys (girls mean 4.8, S.D. 0.9; boys mean 4.4, S.D. 1.0, effect 0.4), and body image of opposite sex peers was higher for boys than girls (boys mean 5.0, S.D. 1.1; girls mean 4.1, S.D. 0.9, effect 0.8). Multiple regression indicated gendered social perceptions make a statistically significant but not substantial contribution to adolescent body image ($R^2 = 0.08$), that were stronger links for boys' body image with opposite-sex body inmage, and stronger for girls same-sex body image.

Personal and Social identity in Body Image. A substantial contribution to adolescent body image was evident from a sense of Group Belonging, although less strongly from Individuality. Together, social and personal identity explained a fair proportion variance in adolescent body image, for both girls ($R^2 = 0.32$) and boys ($R^2 = 0.27$). It is important to note that the results were quite consistent across age groups, for 11 or 12 to 16 years.

Table1. Contributions of Belonging and Individuality to Body Image in Study 1.

| Age groups | 11, 12 years | 13 years | 14 years | 15 years | 16 years |
|---|---|---|---|---|---|
| Belonging | $\beta = 0.43$ | $\beta = 0.49$ | $\beta = 0.47$ | $\beta = 0.47$ | $\beta = 0.49$ |
| Individuality | $\beta = 0.23$ | $\beta = 0.11$ | $\beta = 0.24$ | $\beta = 0.20$ | $\beta = 0.21$ |

Study 2 replicated ASK-S&P models and confirmed the social basis of adolescent Body Image. Perceptions of Same-sex and Opposite Body Image contribute to own Body Image to some extent ($R^2 = 0.14$), for both boys ($R^2 = 0.19$) and girls ($R^2 = 0.14$). For boys, the opposite sex provided the salient social comparison. For girls, salient social comparisons were also with girls. Again, self concepts that report on a sense of individuality and of belonging to social groups at school provide a better explanation ($R^2 = 0.24$). Personal and social identity made substantial contributions to adolescent Body Image for both boys ($R^2 = 0.29$) and girls ($R^2 = 0.22$).

## DISCUSSION

Body image was conceptualised within related yet discrete social and physical Aspects of Self Knowledge (Bornholt, 1996b), based on sound measurement of multi-faceted self concepts (Byrne, 1996). As a general observation, the findings support recent studies by Tiggemann (1996) and Striegel-Moore et al. (1993) in demonstrating that adolescent Body Image is

inherently socially based. In addition, such social interpretations of the results of the present study were strengthened by the replication of the study with another sample of adolescents. Replication required that the samples were relatively large and similar in terms of age and gender, as well as socio-economic indicators. This means further studies using the same ASK Inventory are needed to suggest whether the findings generalise to other settings.

From the present study, tt seems that explanations of body image rely to some extent on implied comparisons within and between salient social groups. In general, both girls and boys tend to perceive that other girls have a higher body image than themselves, and this sense of 'other' impacts on own body image. The implication is that girls make distinctions about body image within their social group, a.id boys feel similar to other boys and distinct from girls.

In addition, indicators of social and personal identity also contribute to adolescent body image. For girls and boys, a sense of belonging to peer groups at school and to some extent a sense of individuality suggest that we need to consider personal as well as social layers of explanation for body image. This application of self categorization theory (Oakes et al., 1994) demonstrates links from personal and social self to body image that provides a meaningful if complex explanation of sources of adolescent body image.

A combined model of gendered comparisons and self categorization describes body image quite well, for both boys and girls, across ages 11 to 16 years. Results suggest that girls and boys both look to gendered social groups at school, in reflecting on body image. Body image is based on a sense of group belonging as well as a developing sense of individuality, through social comparison with other girls as the common social object. The outcomes are quite distinct because for boys 'most girls' are to some extent the 'other', yet to girls the comparison group invokes a within-group process. This suggests that further social groupings by adolescent girls are salient to body image.

Implications for research, theory and practice

Social explanations of adolescent body image in terms of self categorization not only fits well with what adolescents say about themselves and their peers, but brings with it possibilities of enhancement of adolescent body image. Intervention studies on self concepts (Hattie, 1994) generally rely on information rather than normative feedback, and outcomes have been less than encouraging. In contrast, the social basis of body image that relies on personal and social categorisations suggests that tailored personal and social feedback may be more effective (see Oakes et al., 1994; Bornholt & O'Neill, 1996; Bornholt & Ingram, 1996).

Theoretical assumptions apply quite well for three reasons. First, the content 'Body Image' is important to adolescents. Second, personal and social identity is clearly a salient feature of the school context. The third is that body image is highly accessible.

The results of the present study suggests further research on adolescent body image seems less pressing for adolescent boys; for whom physical development in size and strength is generally towards what they see as socially desirable body shapes. Understanding an inherent social identity in body image seems more pressing for adolescent girls. A closing comment therfore draws on ongoing work with young women at a performing arts high school (Bornholt & Russell, in preparation). For girls, the accessibility of body image means that apparently straightforward information in education programmes about puberty and body development may weaken otherwise robust body image. In contrast, information that is given in the context of socially relative statements tends to enhance body image.

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# Understanding the social basis of adolescent Body Image

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- Prevalence of clinical cases and general concerns about the body
- Need to understand sources of body image
- Why focus on adolescence ?
- Body image has a strong social basis but what kind of social comparisons?

Research question

What contributes to body image from:

(a) gendered social comparisons, and

(b) self categorizations about belonging and individuality?

Tabl

e 1

Number of participants in Study 1 & 2 by age and gender

| *N* | Age in years | 11 12 | 13 | 14 | 15 | 16 | Total |
|---|---|---|---|---|---|---|---|
| Study 1 | girls | 39 | 43 | 29 | 37 | 27 | 175 |
| | boys | 56 | 63 | 78 | 53 | 36 | 286 |
| Study 2 | girls | 42 | 44 | 20 | 42 | 24 | 172 |
| | boys | 68 | 60 | 74 | 51 | 30 | 283 |

Table 2 Items and scales from the ASK Inventory

| | |
|---|---|
| Friendship | *At school I...* am easy to like |
| | I get along well with friends |
| | I find it easy to make new friends |
| | I have some good friends/mates |
| | I think I'm a friendly person |
| Self Expression | I find it easy to talk in a group |
| | I like to be called on to speak in class |
| | I can express my opinions |
| | I can let others know how I'm feeling |
| | I have a good sense of humour |
| Belonging | I feel there are students similar to me |
| | I am part of a crowd or 'in-group' |
| | I get asked to hang out with friends |
| | I like to fit in and go with the flow |
| | I feel like I belong to my group/gang |
| Individuality | I like my own company |
| | I need my personal space |
| | I consider myself unique |
| | I enjoy individual sports and activities |
| | I am not influenced by other people's opinion |
| Body Image | I feel I am physically well co-ordinated |
| | I like the way my body looks |
| | I think that I'm physically mature |
| | I would consider that I am physically attractive |
| | I feel what I eat affects my looks |
| Appearance | I like the way I dress |
| | I tend to dress in what's in fashion |
| | I dress "in" regardless of how I look |
| | I feel my dress sense shows who "I" am |
| | I think people notice what I wear |

## Aspects of Self Knowledge (ASK) Inventory

Social and Physical Aspects of Self Knowledge scales are each indicated by five items. These aspects tend to cluster around 'Self Expression', where Individuality is distinct from Belonging, and a distinction is made for related aspects of Body Image and Appearance.

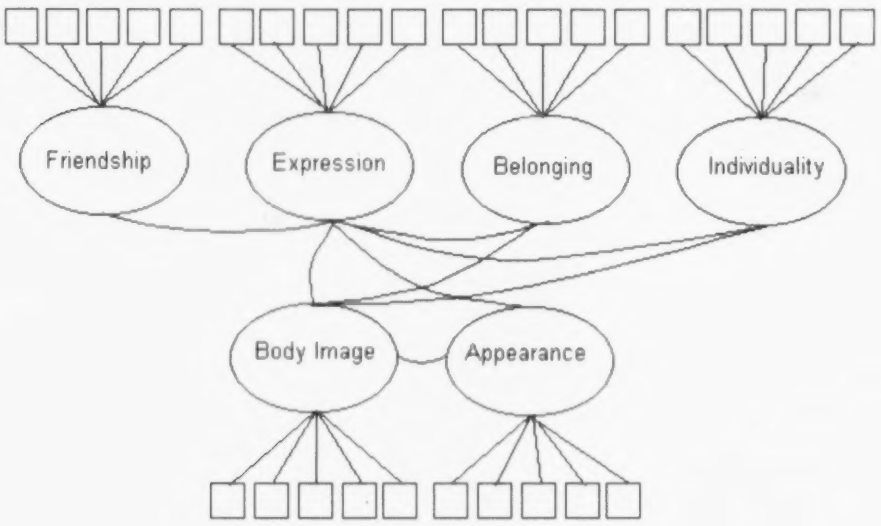


Table 3

ASK-S&P scales indicated by items (confirmatory factor analysis), and reliability of scales as internal consistency of items within scales (alpha coefficients)

| Aspects | Item 1. | 2. | 3. | 4. | 5. | Internal Consistency |
|---|---|---|---|---|---|---|
| Physical Aspects | | | | | | |
| Body Image | .63 | .79 | .59 | .83 | [.05][a] | 0.67 |
| Appearance | .69 | .56 | .34 | .50 | .43 | 0.64 |
| Social Aspects | | | | | | |
| Friendship | .77 | .85 | .77 | .64 | .68 | 0.86 |
| Self Expression | .74 | .58 | .80 | .73 | .58 | 0.81 |
| Belonging | .51 | .70 | .73 | .59 | .70 | 0.79 |
| Individuality | .67 | .71 | .63 | .47 | .41 | 0.71 |

*Notes.* (a) This item 'I feel what I eat affects my looks' was excluded from the Body Image scale

Table 4 .
Descriptive statistics (mean, s.d., skewness, kurtosis) and inter-correlations for ASK-S&P Friendship, Expression, Belonging, Individuality, Body Image and Appearance

| ASK-S&P | mean | s.d. | skewness | kurtosis |
|---|---|---|---|---|
| 1. Friendship | 5.44 | 1.1 | -0.9 | 0.6 |
| 2. Expression | 4.82 | 1.3 | -0.4 | 0.01 |
| 3. Belonging | 4.87 | 1.3 | -0.6 | 0.2 |
| 4. Individuality | 4.96 | 1.2 | -0.3 | -0.4 |
| 5. Body Image | 4.44 | 1.1 | -0.5 | 0.4 |
| 6. Appearance | 4.28 | 1.1 | -0.2 | 0.2 |

| ASK-S&P | correlations | | | | | |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1. Friendship | 1.00 | | | | | |
| 2. Expression | 0.56* | 1.00 | | | | |
| 3. Belonging | 0.66* | 0.37* | 1.00 | | | |
| 4. Individuality | 0.15* | 0.36* | 0.06 | 1.00 | | |
| 5. Body Image | 0.54* | 0.43* | 0.46* | 0.24* | 1.00 | |
| 6. Appearance | 0.49* | 0.44* | 0.52* | 0.24* | 0.55* | 1.00 |

Note. * correlations statistically different from zero ($p<.001$)

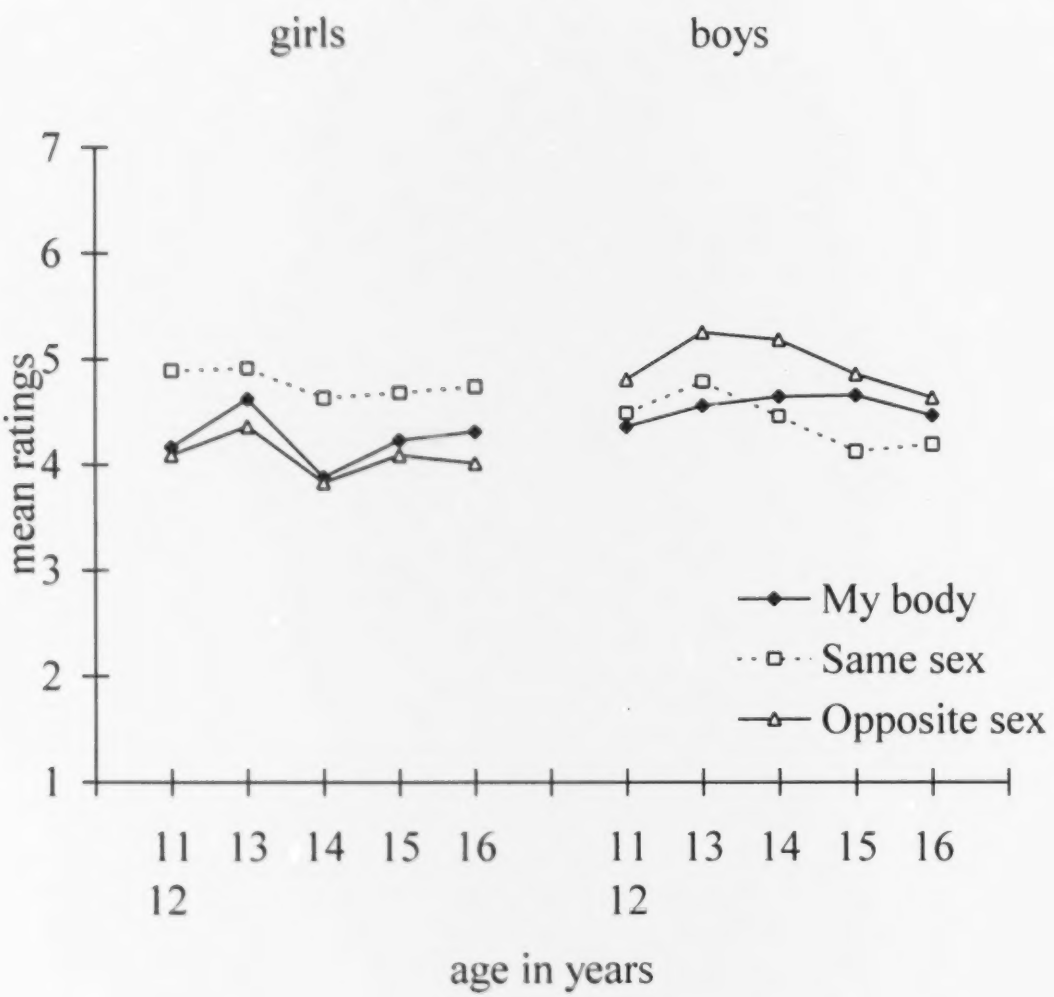


Figure 1.
Body Image about self, same-sex and opposite-sex peers by boys and girls

Table 5.

Summary of multiple regression analyses for the relative contributions to Body Image from same-sex and opposite-sex Body Image, and from Individuality and Belonging.

| Contributors to | Body Image | B | SE B | $\beta$ |
|---|---|---|---|---|
| Age in years | | 0.01 | 0.04 | 0.02 |
| Gender (boys = 0 girls = 1) | | -0.28 | -0.11 | -0.15 |
| Social Comparisons | Same-sex | 0.14 | 0.06 | 0.11 |
| | Opposite-sex Body Image | 0.20 | 0.05 | 0.20* |
| Personal & Social | Group Belonging | 0.39 | 0.04 | 0.45* |
| Self-categorization | Individuality | 0.20 | 0.04 | 0.22* |
| BOYS | Same-sex | 0.11 | 0.06 | 0.10 |
| Social Comparisons | Opposite-sex Body Image | 0.20 | 0.05 | 0.22* |
| Personal & Social | Group Belonging | 0.48 | 0.05 | 0.49* |
| Self-categorization | Individuality | 0.19 | 0.05 | 0.18 |
| GIRLS | Same-sex | 0.19 | 0.05 | 0.22* |
| Social Comparisons | Opposite-sex Body Image | 0.11 | 0.05 | 0.11 |
| Personal & Social | Group Belonging | 0.48 | 0.04 | 0.46* |
| Self-categorization | Individuality | 0.25 | 0.06 | 0.27* |

Note. * indicate statistically significant beta coefficients ($p<.001$)

Table 6.

Replication in Study 2 of multiple regression analyses for the relative contributions to Body Image from same-sex and opposite-sex Body Image, and Individuality and Belonging

| Contributors to Body | Image | B | SE B | β |
|---|---|---|---|---|
| Age in years | | 0.02 | 0.05 | 0.03 |
| Gender (0 boys, 1 girls) | | -0.39 | -0.14 | -0.17 |
| Social Comparisons | Same-sex | 0.22 | 0.06 | 0.22* |
| | Opposite-sex Body Image | 0.19 | 0.05 | 0.23* |
| Personal & Social | Group Belonging | 0.28 | 0.05 | 0.34* |
| Self categorizations | Individuality | 0.29 | 0.05 | 0.31* |
| BOYS | Same-sex | 0.19 | 0.09 | 0.20 |
| Social Comparisons | Opposite-sex Body Image | 0.27 | 0.08 | 0.29* |
| Personal & Social | Group Belonging | 0.34 | 0.06 | 0.42* |
| Self categorizatons | Individuality | 0.27 | 0.07 | 0.28* |
| GIRLS | Same-sex | 0.43 | 0.10 | 0.41* |
| Social Comparisons | Opposite-sex Body Image | -0.11 | 0.08 | -0.13 |
| Personal & Social | Group Belonging | 0.22 | 0.07 | 0.27* |
| Self categorizatons | Individuality | 0.30 | 0.07 | 0.35* |

*Note. * indicates statistically significant beta coefficients ($p<.001$)*

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